

[Multiple Battery System and Auxiliary Battery Attachment System]

Abstract

The instant invention is directed to a multiple battery system and auxiliary battery attachment system. The invention provides a battery housing having a common positive terminal and a common negative terminal coupled to an electrical system. A main battery having a main positive output and a main negative output is also provided, together with an auxiliary battery having an auxiliary positive output and an auxiliary negative output. A switching device is provided with at least two operating positions. The two operating positions selectively engage the main battery and the auxiliary battery. In the first operating position of the at least two operating positions the common positive terminal is coupled to the main positive output and auxiliary positive output in parallel with each other, a one-way charging circuit extending between and preceding the auxiliary battery. In the second operating position of the at least two operating positions the common positive terminal is coupled to the main circuit and, thereon, to the auxiliary positive at a point beyond the one-way charging circuit to the

auxiliary battery positive. This isolates the main battery during situations where the main battery is discharged, but allows the auxiliary battery to receive a full charge during normal operations to keep it prepared for any emergency.